the penis, and the urine presented a thick sediment, which remained on the diaper after the aqueous particles had evaporated. The child became more and more uneasy, and on the fourth day, finding that it would preclude all hope to defer longer, we endeavoured to form an anus, by incising in the ordinary place, and subsequently to penetrate to the gut, by pushing the bistoury and trocar into the ordinary situation of the rectum, but every effort failed. The infant continued to become more restless; rejected from its stomach the small quantity of milk which it took, and after the fifth day, till about the ninth, it could scarcely be induced to swallow anything. Then, however, wonderful to say, without any particular cause, he took the breast, and gradually the appetite returned; the vomiting became less frequent, the child looked better, and seemed to suffer less; this improved condition continued till the fourteenth day, when all the symptoms returned and gradually increased till the death of the little sufferer on the 21st day of extra uterine life. The whole amount of sedimentous matter passed through the urethra of this child, we estimated at less than two teaspoonsful.

On examining this body after death, we found great emaciation, particularly of extremities; the abdomen distended; its percussion over lower part dull; the skin covering abdomen of a light brown. On opening the body, the peritoneum both over the parietes and bowel was injected, and of a dark red. No adhesions had been formed, nor was there an inordinate amount of serum. There was no malformation observed in tracing the bowel from above down, till arriving at lower part of colon. This bowel here terminated in a small appendage, resembling the appendicula vermiformes, which communicated with the cavity of the colon, ran below the neck of bladder, and emptied into the urethra at side of the caput gallinaginis.

The bowels were distended with a very thick substance, resembling, as we might suppose, a mixture of meconium and fecal matter.

There was no extraneous matter in the bladder.

All the parents of these children were well formed, and excepting in one instance, no near relationship existed between them.

West Philadelphia, 1847.

ART. IX.—*Extirpation of a peculiar form of Uterine Tumour, simulating Ovarian Disease, by the large Peritoneal Section, followed by an unsuccessful result.* By SAMUEL PARKMAN, M. D., one of the Surgeons of the Massachusetts General Hospital, Boston.

Miss S——, a single woman aged twenty-seven years, entered the Massachusetts General Hospital, Dec. 18th, 1847, with a tumour of the abdomen, and gave the following account of its growth. One year previously, she first observed a fullness of the abdomen, her attention being attracted by her clothes being too small at the waist, and she then detected a tumour which she is rather inclined to think, was towards the left side, though she is not definite upon the point. This tumour has continued to increase slowly at first, but more rapidly within the past six months, until it has attained its present size. Her general health has been unaffected. She

has continued her occupation, that of an operative in a factory, until within a few weeks of the present time, and has relinquished it only because she has resolved upon the removal of the tumour.

The presence of the tumour has exercised no influence upon the alimentary canal, the functions of which are performed with perfect regularity. The menstruation is regular and unattended with pain or other abnormal symptoms. The only inconvenience she suffers, is from the weight of the tumour. In person, Miss S—— is short and spare, complexion brunette, flesh firm, in fact showing all the indications of a good constitution. She is evidently a person of character and intelligence, and her remarks indicate, that she has well weighed her condition, and has made up her mind, after due reflection, to the result of her disease whatever it may be.

Examination of the Tumour.—The patient being in bed, the uncovered abdomen appears enlarged, as in a woman at about the seventh month of utero-gestation—at about an inch below the umbilicus, there is a scar, with the scab still adherent—the result of the introduction of a trocar by Dr. Crosby of Manchester, N. H., from which no fluid followed. Percussion of the abdomen gives a resonant sound in the right lumbar, the right hypochondriac and epigastric regions—in the left hypochondriac and lumbar regions, there is resonance if the body be inclined to the opposite side; when lying on the back this resonance disappears. In all other parts of the abdomen there is perfect and complete dullness. The tumour then occupies the hypogastric right and left iliac, umbilical and left lumbar regions, and encroaches upon the left hypochondriac and epigastric. The tumour is perfectly well defined, its edges rounded, and appears as if composed of three pretty distinct lobes, the largest forming the chief of the mass occupying the centre of the cavity and reaching to the epigastrium; towards the right lumbar, a smaller one, and in the left iliac region one smaller still. The whole is readily grasped and moved in the abdomen—there is no distinct fluctuation, but it gives the sensation to the hand of being composed chiefly of an elastic texture containing cysts scattered throughout its substance.

Examined per vaginam, the os uteri is readily felt, soft and yielding, situated just behind the os pubis—and posteriorly to this there is felt a rounded tumour about the size of an egg—which same tumour is felt by an examination per rectum, and is concluded to be the body of the uterus, retroverted by the great tumour.

In making up the diagnosis upon the nature of this tumour, it appeared to my mind, that the decision lay between two classes of abnormal growths, viz., a tumour of the uterus, or of the ovary. That it was not a common fibrous tumour appeared almost certain, from its rapid growth, the peculiar sensation it gave to the hand, and the absence of menorrhagia, so common an attendant upon these. That it was an ovarian tumour, appeared indicated by its rapid growth, the peculiar elastic sensation and its history. All these circumstances pointed towards ovarian disease—they did not make the diagnosis certain, however. The only perfectly conclusive symptom, the evidence of the presence of fluid, to prove this to be an ovarian dropsy, was wanting; its absence, however, was explained, on the supposition that the mass of the tumour was an elastic solid containing small cysts. The diagnosis may then be thus stated, all the evidence that we have, points towards ovarian disease. There is, however, only sufficient evidence to render it extremely probable, but not certain, that such is the disease. I concluded

also from its mobility, and the absence of pain, that the pedicle was small, and the surface of the tumour free from adhesions.

With these ideas, I called a consultation of the other Surgeons of the Hospital, Drs. J. C. Warren, Hayward, Townsend, J. M. Warren, and H. J. Bigelow, with a view of confirming or pointing out the errors of my diagnosis, and to request their opinions upon the propriety of an operation, for it was upon this that the patient's mind was bent. After a minute and accurate examination of the tumour, their opinions coincided with mine. The evidence appeared to tend decidedly to the conclusion to which I had arrived, the great probability, but not certainty of the disease being ovarian. With reference to an operation it was agreed that it should be attempted, provided a full statement of its ultimate dangers and chances of success having been made to the patient, she should freely and fairly, without bias from any one, so elect.

The consultation being finished, I again visited my patient and proceeded to make to her the statement of her case. I told her that the operation had been done a few more than one hundred times, and that she must consider her chance as not more than one out of two. Before I could finish, however, she cut me short by saying, "I have been told all this before: are you willing to undertake the operation—it is my determination, and I take the chances of the result." I again asked her if she was certain that she understood all the dangers to which she was about to subject herself. I told her that death, if it did come, and I again insisted upon the chances, after the operation would probably follow with but a short interval. Her answer was still the same, and under these circumstances I conceived that the patient herself imposed upon me a responsibility which I could not decline.

And here I may pause a few moments, to answer a question which will naturally suggest itself to the reader, whether this operation was undertaken, with the belief that this individual patient had in submitting to it only one chance in two for her life? To this I can reply, and I think fairly, that there was reason to believe, that her chances were considerably more than those above stated. It appears from Mr. Lee's paper, as quoted in South's translation of Chelius' Surgery, that in all the cases thus far recorded of opening the abdominal cavity for the extirpation of tumours, that there has been *one* death to nearly *three* patients operated upon. But it was thought in this case that many of the conditions which have swelled the list of fatal results were absent.

Thus there was reason to believe, that there were no adhesions, a very important circumstance, and that the pedicle was small, the patient was in good health, and of a good constitution, and finally I believed the tumour to be in all probability ovarian. I thought then that this patient's chance, from all these favourable circumstances, was much better than the average, and having exaggerated to her the dangers, I felt myself encouraged to its performance.

With these views, then, the operation was resolved upon, and Saturday, Jan. 8, 1848, fixed upon it for its performance. On Friday the patient was ordered a mild laxative of Castor oil, to be followed by a warm water enema at night, and another the next morning. She was directed to take nothing but gruel for diet, with the view of having the alimentary canal as empty as possible.

On Saturday I found the patient perfectly calm and cheerful, and having arranged her dress so as to prevent any unnecessary exposure, and directed

the administration of forty drops of laudanum at 10½ o'clock, for the purpose of quieting any intestinal movement, I left her, to meet at eleven in the operating theatre.

On going into the consulting room of the hospital, I met, with great pleasure, Dr. Crosby, of Manchester, N. H., who with several other gentlemen had come to Boston to witness the operation. Dr. Crosby, it will be remembered, was the surgeon who had introduced the trocar into the tumour.

In conversing with him on this point, he stated that he did not consider his operation as by any means conclusive against the existence of fluid in the tumour; in fact he was still strongly inclined, from the peculiar sensation imparted to the hand, to consider that there was fluid contained in cysts more or less in number and size. I then stated that if after opening the abdominal cavity, I should find the existence of any large cysts, I could easily discharge their contents, which would much facilitate the attainment of the pedicle of the tumour.

Being thus prepared for all emergencies, at 11 A. M., in company with my colleagues the other hospital surgeons, I repaired to the operating theatre, the temperature of which had been raised to 75°, where were already assembled the medical class of the university, and a number of physicians of the city and vicinity, who had expressed a desire to witness an operation so unusual and important. A few remarks having been made upon the nature of the case, the dangers of the operation, and the circumstances under which it was undertaken, the patient was introduced, and by her cool and determined bearing, attracted the admiration of all assembled.

Being placed upon the operating table, she proceeded to inhale the new anæsthetic agent, chloroform, which was administered by Dr. Bigelow. As soon as the influence of this was completely established, requiring but a few moments, I placed myself upon the right side of the abdomen, which was then uncovered. Dr. J. Mason Warren, who was to be my chief assistant, and who kindly charged himself with the management of the intestines, standing opposite me.

Commencing then the operation, a free incision was made through the skin and cellular tissue in the median line of the abdomen, from midway between the ensiform cartilage and umbilicus, passing to the left of the latter, to the pubes. The cavity of the abdomen was then opened by a small incision below the umbilicus through the linea alba, which was immediately followed by a gush of straw-coloured serum from the peritoneal cavity. Introducing the fore-finger of my left hand into this opening, I quickly passed upon it a probe-pointed bistoury, and slit the abdominal walls up and down in the whole length of the external incision. The tumour was thus completely uncovered, exhibiting its surface with the same divisions previously noticeable to the touch. The scar left by the trochar was distinctly visible. Examining the tumour with the hand, the sensation of a fluid was so distinct and well marked, that seizing a trocar and canula, I plunged them into the mass to the depth of two inches; withdrawing the trocar, no fluid followed. So convinced of its existence was I, however, that I immediately repeated the puncture at another spot—with the same result, however. Without any further delay, then, I turned the tumour from its bed. The mistake, as regards its nature, that had been made was at once evident, it was uterine.

Its origin, however, was not by a small neck, as in the more common form of uterine tumour, but the organ appeared to expand itself and grow

gradually into the enormous mass. Passing my hand into the cavity of the pelvis, I selected a spot which seemed adapted to be girt by a ligature. Through this I passed a large needle, armed with a double thread, composed of eight strands of well waxed saddler's silk, twisted strongly together. Cutting out the needle, I proceeded to tie the two ligatures in opposite directions: so firm and solid, however, was the tissue to be surrounded, that the first ligature broke. I tied the other, which held firm, and then encircled the opposite half of the pedicle with the ends, which I also firmly tied. Another needle similarly armed was then passed in the same situation as the first, and being cut out, each half of the ligature was tied with all the strength of which I was master. I felt and heard the uterine tissue break down under its application, and considering this as satisfactory, with the probe-pointed bistoury I cut off the tumour. A small quantity of black blood followed the incision, evidently only from the part removed.

Examining immediately what we may call the stump, I saw a surface, of about two inches square, perfectly white and bloodless, presenting in its centre an orifice evidently the uterine cavity, and surrounding this, the open mouths of innumerable vessels, the size of the calibre of a pipe stem, not one of them shedding a drop of blood. I considered all danger of hemorrhage as at an end. The abdomen was carefully spunged of the very small quantity of blood that had been lost, not more than a few ounces. The intestines, which of course had escaped, being however perfectly contracted and empty, were returned, the omentum arranged over them, the ligature brought out over the pubes, and the abdominal walls brought together by sutures placed about three quarters of an inch apart. Strips of adhesive plaster were then applied, and over these compresses and a binder.

During the whole operation, the patient gave no sign of suffering, save a very slight motion of the lower extremities when the first incision was made. The pulse continued good throughout. The operation, exclusive of the dressing of the wound, occupied, as I am informed, just twelve minutes, some little time being expended in deciding upon the position of the ligature. This is mentioned as a fact, and not as indicating that celerity was one of the objects aimed at.

The operation thus terminated, the patient, still partially under the influence of chloroform, was conveyed to her bed. In about half an hour she was perfectly restored, and said she had been completely unconscious of the operation. Warm water was applied to the feet, and laudanum directed if pain came on, and a small quantity of hot brandy and water administered.

During the afternoon she continued to rally; the pulse came up well, and at 4½ P. M. she was warm, and in fact desired the removal of some of the clothes. The house surgeon made her frequent visits, and at 7½, when I called again, reported having seen her about half an hour previously, and that she was then doing well. On visiting her, however, it was evident that a change had in the mean time taken place. She had just vomited; the skin was cool, and the pulse barely perceptible; there was no complaint of pain except from the act of vomiting. Examining the dressings there was no sign of bleeding.

Stimulants of course were immediately ordered. Brandy and laudanum, brandy enemata, carbonate of ammonia, and sinapisms to the inside of thighs. She did not rally, however; at 9 o'clock I found her worse, and after remaining some time, I took my leave of my noble-hearted patient, who appeared

fully conscious of her situation, and at eleven she died, all the means that I directed having been fully carried out by my intelligent house surgeon, Dr. Andrews.

The next morning I examined the abdomen. The dressings of the wound were perfectly dry; on cutting the sutures, however, a cause of the death was evident. The cavity contained rather less than a quart of firmly coagulated blood; its origin was from the vessels of the cut surface of the uterus, which was covered by adherent clots.

Description of the tumour.—The weight of the tumour, a considerable quantity of its blood having escaped, was eight pounds and thirteen ounces. It measured about nine inches on an average in its different diameters, and in its form presented the same appearances as felt by the hand through the abdominal walls, viz., the triple lobes. On the anterior surface near the neck was hanging the left Fallopian tube. On examining it with the hand, the sense of fluctuation was so well marked, that it was almost impossible to undeceive one's self of the existence of fluid in cyst, even after many incisions were made into it. These incisions were made in different directions and situations, according as the different by-standers pointed out, each one as he selected his spot, supposing that his diagnosis was certain to prove correct. One straight incision from apex to base made the nature of the tumour perfectly evident. It was seen to be a fibrous tumour developed in the substance of the uterine fundus. A thin layer of uterine tissue enveloped the whole, showing upon the cut surface the open mouths of vessels enlarged as in the pregnant organ. The whole morbid growth had been removed, as shown by the surface where the amputation was made presenting only uterine tissue.

The morbid growth varied very considerably from the usual appearances of the fibrous tumour or fleshy tubercle; it had none of the hard, grisly character, but was soft and compressible like a sponge, presenting large meshes, containing a very considerable quantity of clear serous fluid, which leaked from the incised surfaces.

These appearances, the soft texture, and the fluid abundantly explained the deceptive character of the sensations given to the touch. In the centre of the mass there was a considerable quantity of effused lymph, and a commencement of the disorganization common to these tumours, and which usually destroys life.

The post-mortem examination of the parts left in the pelvis, showed that the tumour originated not at the extreme fundus of the uterus, but rather towards the left side, involving that part into which the Fallopian tube is inserted, which tube it may be remembered was observed upon the removed tumour. The line of the incision separating the tumour from the uterus, passed through the cavity of the organ, cutting off just its upper extremity. The ligature on the right half of the pedicle had done its work effectually. On the left, however, the constriction was less complete. It was evident, however, that the ligature had been drawn and tied tightly, as the uterine tissue had been broken down in its track, but this ligature necessarily involved the Fallopian tube, and a portion of the broad ligament, and these, perhaps, accommodating themselves to the pressure, had caused a relaxation of that upon the uterine tissue. Both ovaries had been left in the pelvis.

Boston, Feb. 1848.